

PB4
W33
no. 67

UNITED STATES NAVAL OBSERVATORY
CIRCULAR NO. 67

U. S. Naval Observatory, Washington 25, D. C.

July 25, 1956

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS
FEBRUARY, 1956

By Winifred Sawtell Cameron

These results are based upon measurements made at the Naval Observatory on plates secured either there or at the Mt. Wilson Observatory. The symbols used for the entries in the successive columns are as follows:

U.T., the epoch of observation in Universal Time.

No., the identifying number of the group assigned by Mt. Wilson.

Δl , the heliographic difference in longitude from the central meridian, measured positive to the west.

φ , the heliographic latitude, measured positive to the north.

ρ , the heliocentric angular distance from the line joining the centers of the Earth and Sun.

A , the true area of the umbra plus penumbra, expressed in millionths of the visible hemisphere.

s , the number of spots.

An asterisk means that no Mt. Wilson number was assigned. Plates secured at the Naval Observatory are indicated by N, and those at Mt. Wilson by M. The plate quality, which follows, is indicated by:

1, Poor; 2, Fair; 3, Good; 4, Very Good; 5, Excellent.

The following five quantities are listed successively at the end of each day, and give for that day:

1. The total number of groups, g .
2. The longitude of the central meridian, L_0 .
3. The latitude of the center of the disc, B_0 .
4. The total value of A .
5. The total value of s .

The mean daily area and the mean relative sunspot number, $r=10g+s$ are given at the end of the month.

These results are a continuation of those published in the *Monthly Weather Review* from February 1, 1927 to December 31, 1947.

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U.T.	No.	Δl	φ	ρ	A	s	U.T.	No.	Δl	φ	ρ	A	s
1.562	11456	-75	+30	80	533	1							
N-3	11456	-61	+28	69	218	3		11453	+85	+24	87	194	1
	11455	-45	-19	46	73	1		(5) (349)	(-6)			590	26
	11450	-40	-36	47	73	1							
	11454	-30	+25	44	32	1	5.631	11456	-22	+32	44	121	2
	11445	+53	-16	54	12	1	N-2	11456	-7	+29	36	24	1
	11453	+55	+24	63	24	1		11456	-6	+30	36	97	1
(6) (30) (-6)					965	9		11456	-5	+29	35	73	3
								11455	+10	-18	16	16	1
2.726	11456	-57	+32	68	436	1		(2) (337)	(-6)			331	8
M-1	11456	-55	+33	67	194	2							
	11456	-44	+28	56	194	3	6.737	11459	-78	-16	78	194	1
	11456	-44	+30	56	291	1	M-1	11456	-7	+32	39	97	2
	11455	-27	-19	30	73	1		11456	-6	+32	38	48	1
	11450	-24	-36	38	97	1		11456	+3	+28	35	12	1
	11454	-14	+25	34	24	1		11456	+4	+30	36	36	2
	11454	-13	+26	34	73	2		11456	+6	+28	35	32	1
	11457	+1	+24	31	48	1		11456	+7	+29	36	97	1
	11453	+58	+24	66	24	2		11456	+8	+28	36	73	1
	11453	+59	+24	67	121	1		11455	+24	-19	26	24	1
	11453	+59	+23	67	73	2		(3) (322)	(-6)			613	11
	11453	+63	+23	70	24	1							
	11453	+65	+23	72	145	1	7.549	11459	-67	-16	68	145	1
(6) (15) (-6)					1817	20	N-2	11456	+1	+31	36	73	1
								11456	+2	+31	36	48	1
3.762	11456	-44	+32	58	145	6		11456	+3	+34	41	16	1
M-3	11456	-42	+32	56	24	2		11456	+5	+33	40	24	1
	11456	-41	+31	55	24	2		11456	+6	+30	37	24	1
	11456	-38	+31	54	12	1		11456	+17	+29	40	61	1
	11456	-33	+27	48	6	1		11456	+18	+29	41	61	1
	11456	-32	+29	48	16	2		(2) (311)	(-6)			452	8
	11456	-31	+28	46	12	3							
	11456	-31	+29	47	32	3	8.549	11459	-54	-18	55	97	1
	11456	-30	+30	46	121	1	N-2	11456	+13	+31	38	61	1
	11456	-29	+28	46	16	2		11456	+14	+30	38	24	1
	11456	-28	+28	44	12	3		11456	+15	+34	43	16	1
	11455	-14	-19	19	24	2		11456	+18	+34	44	36	1
	11450	-14	-37	34	6	2		11456	+31	+30	47	24	1
	11450	-12	-37	34	32	1		11456	+32	+30	48	48	1
	11454	0	+25	32	16	3		(2) (298)	(-6)			306	7
	11457	+14	+24	34	16	2							
	11453	+69	+24	75	48	4	9.790	11459	-37	-16	37	97	1
	11453	+70	+24	76	16	1	N-1	11460	-2	+22	29	36	1
	11453	+70	+23	76	145	3		11460	+2	+20	26	73	1
	11453	+72	+22	79	97	3		11456	+31	+31	47	24	1
	11453	+78	+23	82	242	5		11456	+48	+30	59	24	1
(6) (1) (-6)					1062	52		(3) (282)	(-7)			254	5
4.719	11456	-33	+32	50	145	3	10.651	11461	-75	+21	78	339	1
M-3	11456	-30	+32	48	12	1	N-1	11462	-73	+17	76	48	1
	11456	-30	+30	47	6	4		11459	-26	-17	27	97	1
	11456	-28	+32	48	12	1		11459	-23	-18	26	16	1
	11456	-18	+29	41	12	2		11460	+7	+23	31	32	1
	11456	-17	+30	41	97	2		11460	+13	+21	31	61	1
	11456	-17	+29	40	16	3		(4) (271)	(-7)			593	6
	11456	-16	+28	38	24	2							
	11455	-1	-19	14	16	3	11.719	11462	-76	+24	80	970	3
	11450	0	-37	33	32	2	M-2	11462	-75	+22	78	73	2
	11454	+9	+26	34	12	1							
	11454	+12	+25	34	12	1							

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U. T.	No.	Δl	φ	ρ	A	s	U. T.	No.	Δl	φ	ρ	A	s
		$^{\circ}$	$^{\circ}$	$^{\circ}$					$^{\circ}$	$^{\circ}$	$^{\circ}$		
	11462	-75	+25	80	339	3	N-2	11471	-77	+20	79	145	1
	11462	-68	+21	72	242	3		11469	-68	+16	71	97	2
	11462	-66	+22	71	73	2		11469	-65	+16	68	16	1
	11462	-64	+20	68	12	1		11469	-61	+18	65	218	3
	11462	-57	+20	64	24	1		11467	-66	-25	67	145	2
	11464	-75	-25	76	24	1		11467	-63	-24	64	97	1
	11461	-60	+24	66	339	1		11467	-59	-21	60	24	2
	11463	-58	-22	59	16	1		11467	-58	-23	60	48	1
	11463	-57	-19	58	24	4		11467	-58	-21	59	145	2
	11463	-57	-23	58	12	2		11467	-54	-22	54	267	1
	11463	-56	-19	56	16	1		11466	-56	+19	61	97	3
	11463	-56	-21	56	194	3		11466	-54	+19	59	630	1
	11459	-11	-16	15	73	1		11462	-39	+22	48	339	1
	11459	-7	-16	13	12	1		11462	-38	+21	47	170	2
	11460	+27	+20	38	6	2		11462	-37	+23	47	291	3
	(6)	(256)	(-7)		2449	32		11462	-36	+20	45	145	2
12.710	11467	-81	-19	81	194	3		11462	-35	+20	44	291	4
M-2	11466	-79	+22	81	485	1		11462	-35	+24	46	48	2
	11462	-64	+24	69	242	2		11462	-34	+22	44	582	6
	11462	-61	+25	66	291	1		11462	-32	+21	42	97	4
	11462	-60	+22	65	436	5		11462	-31	+19	41	73	2
	11462	-58	+25	64	145	2		11462	-28	+19	38	73	1
	11462	-57	+23	63	194	4		11461	-23	+22	36	291	2
	11462	-56	+21	61	145	4		11463	-19	-22	24	24	3
	11462	-54	+24	61	48	2		11463	-18	-21	23	97	1
	11462	-52	+23	58	24	1		11459	+26	-15	27	32	1
	11461	-46	+24	54	291	1		(9)	(219)	(-7)		4967	55
	11463	-45	-22	46	12	2	15.740	11473	-78	-23	79	145	1
	11463	-44	-19	44	16	3	N-1	11473	-77	-22	78	73	1
	11463	-43	-22	44	12	1		11473	-68	-21	69	388	1
	11463	-42	-21	43	145	2		11471	-69	+23	74	145	1
	11465	-29	-26	35	6	1		11471	-69	+21	73	242	1
	11459	+1	-16	9	48	1		11471	-59	+22	64	194	1
	(7)	(243)	(-7)		2734	36		11472	-66	+26	72	145	1
13.574	11467	-79	-25	80	97	1		11469	-56	+18	61	61	1
N-2	11467	-68	-22	69	242	2		11469	-51	+17	56	194	2
	11469	-76	+17	78	145	2		11469	-45	+19	52	242	1
	11466	-70	+20	74	242	2		11469	-44	+19	51	48	1
	11466	-67	+19	71	533	2		11467	-50	-24	52	121	2
	11462	-53	+22	59	291	1		11467	-49	-22	50	121	1
	11462	-51	+21	56	194	1		11467	-45	-19	45	16	1
	11462	-51	+24	58	218	1		11467	-44	-22	45	145	3
	11462	-50	+19	56	170	1		11467	-41	-19	42	48	1
	11462	-48	+19	55	242	3		11467	-39	-20	41	73	2
	11462	-47	+21	54	194	1		11467	-37	-22	39	242	1
	11462	-47	+23	55	242	3		11466	-36	+21	45	582	1
	11462	-46	+24	55	24	1		11470	-32	+22	43	73	1
	11462	-45	+20	52	121	3		11470	-31	+22	42	61	1
	11462	-43	+20	50	97	4		11470	-28	+21	40	97	1
	11462	-43	+21	50	24	2		11470	-27	+20	38	24	1
	11461	-36	+22	45	291	1		11462	-25	+23	38	267	2
	11463	-34	-23	35	16	2		11462	-24	+25	39	48	1
	11463	-32	-23	34	36	1		11462	-23	+22	36	170	2
	11463	-31	-21	33	145	2		11462	-22	+24	37	339	3
	11465	-17	-26	26	16	1		11462	-21	+25	37	61	1
	11459	+13	-15	15	48	1		11462	-20	+23	35	170	2
	(8)	(232)	(-7)		3628	38		11462	-19	+24	36	32	1
14.549	11473	-87	-23	88	485	1		11462	-18	+21	33	436	4
								11462	-16	+23	34	194	2
								11462	-14	+22	32	32	2
								11461	-7	+23	31	291	1
								11463	-3	-19	14	48	1

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U. T.	No.	Δl	φ	ρ	A	s	U. T.	No.	Δl	φ	ρ	A	s
	11459	+42	-15	42	24	1		11469	-24	+17	35	16	1
	(11)	(204)	(-7)		5592	51		11469	-23	+17	34	73	4
16.547	11473	-66	-24	67	73	1		11469	-23	+19	35	16	1
N-3	11473	-65	-24	66	24	1		11469	-21	+18	33	24	2
	11473	-58	-23	59	533	1		11469	-17	+20	33	194	1
	11471	-59	+20	64	145	2		11467	-24	-24	28	194	2
	11471	-58	+22	64	291	5		11467	-23	-22	26	242	5
	11471	-57	+19	62	97	2		11467	-22	-25	26	48	5
	11471	-53	+22	59	32	1		11467	-22	-24	26	73	1
	11471	-49	+19	55	194	2		11467	-21	-23	25	97	2
	11472	-56	+24	62	145	1		11467	-20	-24	26	16	2
	11469	-46	+16	51	32	1		11467	-18	-21	23	73	2
	11469	-41	+16	46	145	3		11467	-17	-20	22	194	6
	11469	-36	+18	44	194	1		11467	-16	-19	21	97	4
	11467	-39	-25	43	218	2		11467	-16	-18	20	16	2
	11467	-38	-24	41	242	2		11467	-15	-22	21	16	2
	11467	-37	-25	41	73	3		11467	-13	-21	18	291	4
	11467	-37	-24	40	48	1		11467	-13	-23	20	16	1
	11467	-36	-22	38	48	1		11467	-10	-22	18	339	2
	11467	-35	-19	36	36	2		11466	-10	+21	29	436	1
	11467	-34	-22	36	194	4		11470	-8	+22	30	24	1
	11467	-31	-21	33	61	1		11470	-7	+22	29	97	1
	11467	-28	-22	32	97	2		11470	-5	+21	28	73	3
	11467	-26	-23	30	339	2		11470	-5	+23	30	97	4
	11466	-27	+19	37	582	1		11470	-4	+23	30	97	3
	11470	-23	+21	35	145	4		11470	-3	+20	27	24	1
	11470	-22	+21	35	73	1		11470	-2	+18	26	16	2
	11470	-18	+18	31	48	3		11470	-1	+21	27	48	2
	11470	-17	+18	31	133	1		11470	0	+19	26	16	2
	11462	-16	+23	34	291	4		11470	+1	+21	27	32	1
	11462	-15	+25	35	16	1		11470	+2	+21	27	145	1
	11462	-14	+25	35	16	1		11462	+1	+24	31	145	1
	11462	-13	+23	33	436	7		11462	+3	+24	32	194	3
	11462	-12	+20	29	48	2		11462	+3	+22	29	24	1
	11462	-11	+24	33	170	3		11462	+3	+25	33	48	2
	11462	-9	+20	28	485	7		11462	+4	+27	35	16	1
	11462	-6	+21	28	145	4		11462	+4	+18	26	16	1
	11462	-5	+20	27	48	4		11462	+5	+23	30	121	4
	11462	-4	+21	27	48	3		11462	+5	+25	33	32	1
	11462	-1	+20	27	12	1		11462	+6	+25	34	97	3
	11461	+2	+22	29	339	1		11462	+6	+19	26	16	1
	11463	+7	-19	15	36	1		11462	+7	+21	28	16	5
	11459	+51	-16	51	12	1		11462	+9	+23	31	145	2
	(11)	(193)	(-7)		6344	91		11462	+10	+23	32	73	1
17.726	11473	-49	-23	51	73	1		11462	+10	+20	28	97	1
M-1	11473	-48	-22	50	16	1		11462	+11	+23	33	24	2
	11473	-41	-21	42	436	1		11462	+13	+23	33	97	1
	11471	-43	+23	51	6	1		11462	+13	+21	31	24	1
	11471	-41	+25	51	436	3		11462	+14	+23	34	32	1
	11471	-40	+22	48	73	2		11461	+16	+20	32	16	1
	11471	-38	+23	48	48	2		11461	+17	+19	32	73	1
	11471	-37	+24	48	16	2		11461	+19	+23	35	291	1
	11471	-36	+21	45	24	2		11463	+23	-20	26	48	1
	11471	-36	+25	48	24	1		11476	+65	+18	68	6	1
	11471	-34	+23	45	24	1		(11)	(177)	(-7)		6346	131
	11471	-34	+24	46	36	1	18.718	11478	-86	-22	86	73	1
	11471	-31	+22	43	73	1	N-2	11473	-37	-23	39	73	1
	11471	-28	+18	38	109	2		11473	-29	-21	33	485	2
	11472	-38	+26	50	145	1		11473	-28	-23	33	16	1
	11469	-25	+18	36	16	1		11471	-29	+24	43	485	4
								11471	-28	+21	40	121	2
								11471	-26	+21	38	48	2

U.T.	No.	Δl	φ	ρ	A	s	U.T.	No.	Δl	φ	ρ	A	s
	11471	-25	+24	40	36	1		11471	- 8	+21	29	97	2
	11471	-24	+20	36	32	1		11471	- 6	+20	27	97	1
	11471	-23	+21	35	97	2		11472	-16	+25	36	145	1
	11471	-23	+22	36	97	2		11467	+ 1	-23	16	485	3
	11471	-21	+23	36	16	2		11467	+ 3	-23	16	36	1
	11471	-19	+21	34	145	1		11467	+ 5	-24	17	16	1
	11472	-26	+25	42	194	1		11467	+ 6	-21	15	24	1
	11467	-13	-21	18	145	2		11467	+ 7	-21	16	194	3
	11467	-12	-24	21	388	2		11467	+13	-22	19	776	4
	11467	-11	-22	17	48	1		11469	+ 6	+19	26	145	1
	11467	- 9	-23	18	48	2		11466	+13	+21	31	533	1
	11467	- 8	-25	20	97	3		11470	+16	+22	34	533	3
	11467	- 6	-24	19	48	1		11470	+18	+23	35	73	2
	11467	- 6	-19	15	32	3		11470	+18	+21	34	73	1
	11467	- 5	-21	15	194	1		11470	+20	+24	36	97	2
	11467	- 4	-19	14	24	4		11470	+22	+20	35	73	1
	11467	+ 2	-22	15	679	3		11470	+24	+21	36	242	2
	11469	-11	+17	26	16	2		11470	+26	+20	37	291	1
	11469	-10	+18	27	12	1		11462	+24	+25	40	170	2
	11469	- 7	+18	26	12	1		11462	+26	+24	41	485	5
	11469	- 5	+19	26	194	1		11462	+29	+25	44	121	1
	11466	+ 1	+20	26	533	1		11462	+30	+23	42	194	1
	11470	+ 6	+21	27	97	3		11462	+30	+21	41	121	1
	11470	+ 7	+19	27	24	1		11462	+33	+21	43	97	3
	11470	+ 8	+23	31	145	1		11462	+34	+22	45	145	2
	11470	+10	+20	28	194	2		11462	+35	+23	46	121	2
	11470	+12	+21	30	194	3		11462	+38	+23	47	194	1
	11470	+14	+20	31	16	2		11462	+39	+22	48	97	1
	11470	+16	+19	32	16	2		11461	+44	+23	52	291	1
	11462	+13	+23	33	339	4							
	11462	+15	+22	33	291	4							
	11462	+16	+25	35	145	1							
	11462	+18	+23	35	194	4							
	11462	+19	+21	34	121	5							
	11462	+21	+19	34	32	1							
	11462	+22	+21	34	97	1							
	11462	+22	+22	36	145	3							
	11462	+23	+19	35	16	2							
	11462	+26	+22	38	194	3							
	11462	+27	+23	40	24	1							
	11461	+32	+23	44	388	1							
	11463	+36	-21	37	32	1							
	11476	+80	+19	83	48	1							
	(12)	(165)	(-7)		7140	97							
19.625	11480	-72	+22	76	388	1							
N-1	11478	-70	-22	72	97	1							
	11473	-26	-23	29	48	1							
	11473	-17	-24	24	32	1							
	11473	-16	-21	21	485	1							
	11473	-15	-18	18	16	2							
	11473	-14	-23	21	12	1							
	11471	-18	+24	36	194	1							
	11471	-16	+23	35	145	2							
	11471	-16	+20	32	73	1							
	11471	-16	+22	34	97	1							
	11471	-15	+21	32	73	2							
	11471	-14	+23	34	24	1							
	11471	-13	+24	35	97	1							
	11471	-12	+21	30	73	1							
	11471	-11	+20	29	48	1							
	11471	-10	+22	30	48	1							
	11471	- 9	+20	28	61	1							

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U. T.	No.	Δl	φ	ρ	A	s	U. T.	No.	Δl	φ	ρ	A	s	
	11469	+19	+22	35	24	1		11462	+49	+25	58	97	1	
	11469	+20	+19	34	158	1		11462	+54	+25	61	582	10	
	11466	+24	+19	36	6	1		11462	+57	+23	63	194	2	
	11466	+26	+22	39	485	1		11462	+59	+21	64	291	3	
	11470	+29	+24	43	679	6		11462	+67	+22	71	97	2	
	11470	+32	+23	43	16	1		11461	+70	+23	75	291	1	
	11470	+33	+21	43	36	3		11463	+76	-17	77	24	1	
	11470	+34	+23	45	61	3			(15)	(127)	(-7)	8282	106	
	11470	+36	+23	46	145	4		22.637	11482	-62	-31	63	170	3
	11470	+37	+22	46	73	2		N-2	11482	-60	-31	62	48	1
	11470	+38	+21	46	24	2			11481	-51	+25	58	121	1
	11470	+39	+21	47	145	4			11480	-40	+21	47	36	1
	11470	+42	+21	49	388	1			11480	-39	+23	48	48	1
	11462	+37	+25	49	194	4			11480	-35	+23	46	194	3
	11462	+40	+24	50	291	4			11480	-33	+24	45	388	1
	11462	+42	+25	52	242	4			11478	-29	-22	33	48	1
	11462	+42	+24	51	48	1			11473	+23	-19	26	485	1
	11462	+44	+23	53	242	5			11471	+23	+25	38	412	3
	11462	+47	+22	55	291	6			11471	+25	+23	38	85	2
	11462	+49	+21	56	48	1			11471	+26	+25	41	242	3
	11462	+53	+23	60	121	2			11471	+33	+22	44	194	2
	11461	+58	+23	64	339	1			11472	+24	+26	41	121	1
	11463	+59	-17	59	16	2			11467	+39	-23	42	339	2
	11463	+60	-18	60	12	1			11467	+43	-23	44	24	1
	11463	+61	-17	61	36	2			11467	+46	-22	46	32	2
	(13)	(139)	(-7)		7781	131			11467	+48	-21	49	48	1
21.576	11482	-76	-31	77	291	3			11467	+51	-19	51	97	1
N-3	11484	-73	+16	76	121	1			11467	+53	-21	54	533	1
	11481	-65	+24	70	73	1			11469	+46	+19	53	194	1
	11480	-55	+21	61	12	1			11466	+54	+22	60	582	1
	11480	-54	+23	61	12	1			11470	+55	+24	62	291	3
	11480	-53	+23	59	6	1			11470	+58	+22	64	485	2
	11480	-52	+24	59	6	2			11470	+61	+23	66	97	2
	11480	-50	+23	57	85	1			11470	+64	+23	69	121	1
	11480	-47	+23	55	339	3			11470	+67	+23	72	97	2
	11478	-44	-23	45	24	1			11470	+67	+21	71	194	2
	11473	+3	-23	16	48	4			11470	+71	+22	75	291	1
	11473	+6	-22	16	16	2			11462	+65	+25	70	194	3
	11473	+9	-20	16	533	1			11462	+69	+25	75	485	1
	11471	+10	+24	34	436	12			11462	+74	+24	79	388	2
	11471	+11	+22	31	73	2			11461	+80	+22	84	242	1
	11471	+12	+21	30	48	3			(13)	(113)	(-7)	7326	54	
	11471	+14	+24	34	194	4		23.553	11486	-74	-17	76	36	1
	11471	+18	+21	34	242	3		N-3	11482	-51	-30	54	97	2
	11472	+11	+26	35	145	2			11482	-49	-31	53	24	1
	11467	+25	-23	28	339	4			11482	-48	-30	51	48	1
	11467	+27	-24	32	12	1			11484	-48	+17	54	12	3
	11467	+32	-20	34	32	2			11484	-43	+16	48	12	3
	11467	+32	-22	35	16	1			11481	-41	+24	51	61	3
	11467	+33	-21	35	97	3			11481	-40	+23	49	24	2
	11467	+37	-20	38	97	1			11481	-39	+25	51	133	1
	11467	+39	-22	42	582	2			11481	-38	+24	49	73	2
	11469	+33	+19	42	145	1			11480	-28	+23	42	61	3
	11466	+38	+21	46	533	1			11480	-27	+23	41	12	2
	11470	+41	+23	49	388	3			11480	-26	+22	38	12	4
	11470	+43	+21	51	436	6			11480	-24	+24	38	12	1
	11470	+44	+23	53	16	1			11480	-23	+23	37	267	5
	11470	+45	+23	54	170	1			11480	-22	+24	37	291	2
	11470	+48	+22	55	194	6			11480	-21	+26	38	97	3
	11470	+50	+21	56	170	3			11480	-18	+26	38	61	2
	11470	+54	+22	60	727	1								
	11462	+48	+26	57	48	1								

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U.T.	No.	Δl	φ	ρ	A	s	U.T.	No.	Δl	φ	ρ	A	s
		$^{\circ}$	$^{\circ}$	$^{\circ}$					$^{\circ}$	$^{\circ}$	$^{\circ}$		
	11478	-17	-22	23	32	1		11470	+83	+21	86	242	1
	11485	-6	-23	16	6	1		(14)	(87)	(-7)		5399	60
	11483	+11	+23	33	12	1	25.752	11489	-85	-16	85	145	2
	11483	+12	+24	34	12	1	M-2	11488	-67	-22	68	24	1
	11483	+13	+23	34	6	1		11487	-64	+26	70	24	2
	11473	+33	-17	34	6	1		11487	-59	+24	65	16	4
	11473	+35	-19	36	485	1		11486	-43	-16	44	16	1
	11472	+34	+26	46	24	1		11482	-24	-30	33	12	2
	11472	+35	+26	47	145	1		11482	-21	-30	31	16	2
	11471	+35	+25	46	436	13		11482	-20	-30	30	12	1
	11471	+38	+25	49	145	5		11482	-19	-31	30	16	2
	11471	+39	+24	50	16	1		11484	-16	+21	32	24	2
	11471	+44	+23	53	12	1		11484	-16	+18	31	6	1
	11471	+45	+23	54	242	3		11484	-15	+21	32	16	2
	11471	+45	+21	52	12	1		11484	-14	+18	29	6	1
	11467	+50	-21	51	267	2		11484	-11	+17	26	12	1
	11467	+62	-18	62	24	1		11481	-11	+23	33	12	2
	11467	+65	-20	66	533	2		11481	-9	+25	34	32	8
	11469	+58	+20	64	121	1		11481	-8	+23	32	16	3
	11466	+65	+22	69	485	1		11481	-7	+27	36	6	1
	11470	+65	+24	70	485	1		11481	-5	+26	34	16	4
	11470	+68	+23	73	339	5		11480	0	+23	30	24	3
	11470	+71	+22	75	194	3		11480	+4	+24	32	48	5
	11470	+80	+21	83	194	1		11480	+5	+23	32	48	6
	11462	+77	+23	81	339	3		11480	+6	+25	34	388	6
	(16)	(101)	(-7)		5905	94		11480	+8	+24	33	6	1
24.570	11486	-59	-17	59	36	1		11480	+12	+26	35	12	1
N-2	11482	-36	-30	41	121	2		11478	+10	-21	16	32	1
	11482	-35	-30	40	48	1		11485	+17	-24	24	36	3
	11482	-35	-32	41	12	1		11485	+22	-23	26	12	2
	11484	-33	+20	43	48	2		11485	+24	-22	27	48	1
	11484	-29	+17	37	36	1		11473	+61	-20	61	436	1
	11481	-28	+24	43	48	1		11471	+63	+24	68	194	6
	11481	-27	+22	39	36	2		11471	+65	+24	70	145	2
	11481	-26	+24	40	170	5		11471	+66	+23	71	121	2
	11481	-25	+23	39	32	2		11471	+74	+23	78	97	3
	11481	-23	+25	39	97	2		11472	+63	+26	68	24	1
	11480	-15	+23	34	97	3		11472	+65	+26	71	145	1
	11480	-11	+25	34	16	1		11467	+78	-23	79	194	1
	11480	-10	+23	32	16	1		(14)	(72)	(-7)		2437	88
	11480	-9	+26	35	32	1	26.599	11489	-80	-17	80	145	1
	11480	-8	+24	34	485	4	N-2	11489	-73	-18	74	145	1
	11480	-6	+26	34	61	1		11488	-57	-23	58	48	2
	11480	-4	+26	34	48	1		11487	-54	+24	61	48	1
	11478	-4	-21	15	61	2		11486	-35	-16	36	16	2
	11485	+5	-23	16	73	3		11482	-14	-29	26	12	1
	11485	+7	-22	16	61	1		11482	-13	-30	26	24	1
	11485	+8	-22	16	16	1		11482	-12	-29	25	12	1
	11472	+46	+26	55	12	1		11481	-1	+26	34	73	2
	11472	+48	+26	56	145	1		11481	0	+26	34	48	2
	11471	+46	+25	55	242	4		11490	+5	-25	19	16	1
	11471	+49	+24	57	170	3		11490	+6	-24	19	12	1
	11471	+51	+26	59	48	1		11490	+7	-23	17	16	1
	11471	+53	+25	60	170	1		11490	+8	-24	19	12	1
	11471	+54	+23	60	97	2		11490	+11	-24	21	61	1
	11471	+57	+22	63	6	1		11480	+15	+25	35	16	1
	11471	+59	+22	65	145	1		11480	+16	+25	36	436	2
	11473	+48	-19	48	630	1		11480	+18	+26	38	6	2
	11467	+64	-21	65	242	1		11480	+21	+23	36	24	1
	11467	+78	-20	79	776	1		11480	+21	+27	40	36	1
	11469	+72	+20	76	242	1							
	11466	+79	+22	81	582	1							

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U.T.	No.	Δl	ϕ	ρ	A	s	U.T.	No.	Δl	ϕ	ρ	A	s
		$^{\circ}$	$^{\circ}$	$^{\circ}$					$^{\circ}$	$^{\circ}$	$^{\circ}$		
	11480	+23	+26	40	16	1		11495	+26	+19	36	24	1
	11478	+23	-19	26	24	1		11495	+26	+16	35	24	1
	11485	+31	-23	34	24	1		11495	+28	+18	37	24	1
	11485	+37	-20	38	48	1		11495	+29	+17	38	48	1
	11473	+76	-18	77	582	1		11490	+33	-25	36	12	1
	11472	+78	+27	83	145	1		11490	+36	-24	38	36	1
	11471	+80	+25	85	194	1		11480	+40	+26	51	16	1
	(13)	(60)	(-7)		2239	33		11480	+42	+25	51	121	1
27.729	11489	-66	-16	66	145	1		11480	+44	+26	54	412	2
N-1	11489	-57	-17	57	194	1		11494	+47	-27	50	24	1
	11488	-40	-21	42	48	1		11494	+47	-23	48	16	1
	11487	-36	+23	46	97	1		11485	+64	-19	65	16	1
	11487	-33	+23	44	97	1		(13)	(35)	(-7)		2151	45
	11482	-6	-31	25	73	1	29.557	11493	-61	-26	62	145	1
	11482	+3	-29	24	24	1	N-3	11493	-60	-25	61	48	2
	11481	+15	+25	35	73	1		11493	-58	-24	60	24	2
	11481	+16	+25	35	16	1		11493	-57	-25	59	97	3
	11490	+21	-25	26	73	2		11493	-56	-23	56	6	2
	11490	+26	-24	31	73	1		11493	-54	-24	55	24	1
	11480	+31	+24	44	6	3		11493	-54	-23	55	24	1
	11480	+33	+23	44	48	1		11493	-51	-24	53	339	4
	11480	+35	+25	46	436	3		11492	-52	+25	59	97	1
	11480	+37	+26	49	24	3		11492	-50	+24	57	97	2
	11478	+36	-20	37	32	1		11492	-49	+25	57	12	2
	11485	+53	-20	54	97	1		11492	-48	+23	56	24	2
	(9)	(46)	(-7)		1556	24		11492	-46	+23	55	12	1
28.546	11493	-75	-26	76	73	2		11492	-45	+22	54	24	1
N-3	11493	-73	-25	74	36	1		11492	-44	+23	53	73	2
	11493	-71	-26	72	48	1		11489	-43	-16	44	24	1
	11493	-70	-25	71	24	1		11489	-34	-17	35	145	1
	11493	-69	-24	70	16	1		11487	-14	+23	34	24	1
	11493	-68	-23	69	12	1		11487	-13	+24	34	48	2
	11493	-66	-24	67	158	1		11487	-9	+21	28	24	1
	11492	-66	+24	71	48	1		11487	-7	+22	29	48	2
	11492	-64	+23	69	194	2		11487	-6	+23	30	12	1
	11492	-61	+22	66	73	1		11491	+5	-25	19	16	1
	11492	-57	+23	63	12	1		11491	+5	-24	18	24	1
	11489	-58	-16	58	24	1		11491	+6	-27	22	12	1
	11489	-56	-17	56	61	1		11491	+7	-26	21	36	1
	11489	-53	-17	53	32	1		11482	+19	-30	29	73	1
	11489	-47	-18	48	145	2		11495	+33	+23	44	16	2
	11487	-26	+22	38	48	1		11495	+35	+21	44	12	1
	11487	-26	+23	39	32	1		11495	+37	+20	45	24	2
	11487	-22	+22	35	73	1		11495	+38	+17	44	24	1
	11487	-21	+23	35	16	1		11495	+41	+16	46	24	2
	11491	-8	-26	22	24	1		11495	+42	+20	49	36	3
	11491	-8	-24	19	36	1		11495	+44	+19	51	12	1
	11491	-7	-26	21	61	2		11495	+46	+18	53	145	2
	11486	-6	-18	14	12	1		11481	+36	+27	49	6	1
	11482	+5	-31	25	48	1		11481	+38	+26	51	73	4
	11482	+6	-29	24	16	1		11490	+44	-24	45	61	1
	11482	+7	-26	21	12	1		11490	+50	-23	52	12	1
	11481	+25	+25	40	32	1		11480	+55	+25	62	145	1
	11481	+26	+26	41	12	1		11480	+57	+26	64	339	1
								(10)	(22)	(-7)		2461	64

Mean for 29 days, $A=3438$, $r=138.1$

NOTE: Beginning February 1, 1956, the grid used for estimating areas of sunspots was replaced by a similar one extending to higher solar latitudes.